



217/782-9881

August 3, 2006

Dion Novak
Remedial Project Manager, SR-6J
U.S.EPA, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Technical Memorandum # 1-- Feasibility Study Supplement, Eagle Zinc
Alternative NPL Site

1358070001—Montgomery County
Eagle Zinc Company Alternative NPL Site, Hillsboro, Illinois
Superfund/Technical Report

Dear Mr. Novak:

The Illinois Environmental Protection Agency ("Illinois EPA") has completed its review of CH2M Hill's June 30, 2006, Technical Memorandum #1-- Feasibility Study Supplement for the Eagle Zinc Site. The CH2M Hill document was prepared to supplement Environ's draft Feasibility Study ("FS") Report. CH2M Hill's Technical Memorandum # 1 is a significantly improves upon Environ's earlier FS Report submittal.

The Illinois EPA review of the submitted technical memorandum concentrated on whether this FS technical memorandum adequately identified the ARARs for future remedial action at this site, and if the list alternatives provided is adequate to comply with those ARARs. The Illinois EPA's review comments follow the format of the submitted document.

Comments

Feasibility Study Updates

Contaminant-specific ARARs

Residual Concentrations (p.9)

This document states that “Groundwater greater than 10 feet below ground surface (bgs) is considered a class I potable resource groundwater. Groundwater within 10 feet of the surface is a class II groundwater and IWQS are higher for these groundwaters. Much of the shallow contaminated groundwater migrating along the interface of the residue and the original land surface is likely a class II groundwater.”

If the interface between the slag/residue and original land surface is the determining factor in whether the groundwater is Class I or Class II, the Illinois EPA, Bureau of Land, Groundwater Assistance Unit should review this evaluation in order to determine if the groundwater at the site has been properly classified. In addition, the liquid moving through the residue may meet the definition of leachate in RCRA and/or the nonhazardous waste regulations.

Location-specific ARARs (p. 11)

The document needs to indicate if the site (or a portion of the waste at the site) is within the 100 year floodplain. If it is within the 100 year floodplain, the ARARs associated with construction of a waste management unit with the 100yr. floodplain need to be identified as location specific ARARs on this page, and in Appendix A.

Preliminary Remediation Goals (p.13)

This document discusses the PRGs in terms of risk to human health and the environment. The development of PRGs (and RAOs) should also indicate whether excavation or treatment of materials which exhibit a characteristic of a hazardous waste is a remediation goal. The Illinois EPA is concerned that a remedial action based solely on risk could leave behind material that exhibits one or more of the characteristics of a hazardous waste. This has a direct effect on the ARARs for any proposed remedial action.

Specifically, if waste or contaminated media that exhibits a characteristic of a hazardous waste will remain at the site after remediation, the RCRA requirements for landfills including closure and post-closure would be considered both relevant and appropriate and therefore ARARs. Therefore, in order to properly evaluate the remedial alternatives and verify compliance with ARARs, the discussion of PRGs and RAOs should clearly indicate which of the following is a remedial objective:

- a. Wastes and contaminated media which exhibit a characteristic of a hazardous waste will be removed to an off-site location or treated on-site to non-hazardous levels, or
- b. Wastes and contaminated media that exhibit a characteristic of a hazardous waste will be allowed to remain on-site.

This document refers to the Illinois EPA TACO regulations in the development of the PRGs. This discussion raises a number of comments:

- a. The submitted document clearly states that TACO is not an ARAR. Therefore, TACO should not be used as a basis for the PRGs.
- b. TACO can not be applied to wastes such as the residue piles (slag) at the site.

Development of Remedial Alternatives (p.22)

The document does not include a discussion of which ARARs apply to each alternative, or whether each alternative complies with ARARs.

Based on summary provided for the various wastes, waste concentrations, chemicals of concern and their concentrations, potential contaminant sources, potential transport mechanism, exposure pathways, affected media, and receptors, as well as the related risks, additional alternatives appear to be necessary to comply with ARARs

Appendix A, ARARs

Chemical-Specific ARARs

The Summary of ARARs (p.9-10), Contaminant (Chemical?)-specific ARARs (4.2) cites the LDRs at 35 IAC 728 as Contaminant (Chemical?)-specific ARARs, but Appendix A does not include them under this heading.

Action-Specific ARARs

The action-specific ARARs discuss the management of soil that may exhibit a characteristic of a hazardous waste. However, in the analysis column, several analyses fail to include “waste” that may exhibit a characteristic of a hazardous waste in their discussions. As an example (p.7 of Appendix A), the regulation 40 CFR 268, LDRs discusses the possible LDRs for contaminated soil at the site, but not the LDRs for wastes covering the site and the wastes piles (which are different from the LDRs for contaminated soil).

For the 35 IAC 722 regulations pertaining to the generator requirements in RCRA are applicable if hazardous wastes are generated, not only if they are shipped off-site.

For the 35 IAC 724.210-724.220 regulations, Appendix A list the RCRA closure and post-closure requirements as TBCs. These are promulgated regulations. Therefore, at a minimum they are possible ARARs, and likely will be ARARs if material that exhibits a characteristic of a hazardous waste will be left on-site when the remedial action is complete. This can be allowed only if an appropriate cap, that substantially meets the requirements of 35 IAC 811, is installed to cover the wastes.

For the 35 IAC 724.400- 724.417 regulations, Appendix A states that RCRA requirements for miscellaneous units are not likely ARARs because the units for treating hazardous waste are not likely a remedial action. This conclusion may not be completely accurate. A device such as a pugmill used to stabilize (i.e. treat) contaminated materials meets the definition of a miscellaneous unit. The document states that certain materials will be treated prior to disposal, therefore, at a minimum; these requirements appear to be possible ARARs. The list of ARARs in Appendix A needs to be revised accordingly.

Appendix A states the nonhazardous landfill requirements at 35 IAC 811 are possible ARARs if the construction of a landfill is a remedial action. This conclusion is not completely accurate. If the material meets the definition of a solid or special waste, the requirements for nonhazardous landfill, including closure and post-closure, at 35 IAC 811 would be relevant and appropriate, and therefore ARARs. The list of ARARs in Appendix A needs to be revised accordingly.

This concludes the Illinois EPA's review comments. I believe that we can resolve these ARARs issues to ensure that the wastes remaining on-site and contaminated soil, groundwater, and surface water and sediments are appropriately remediated both on-site and off-site. We look forward to receiving the second Technical Memorandum as an addendum to the FS. I believe a conference call and possibly a meeting may be necessary to resolve these issues.

If you have any comments or questions, please contact me at the above telephone number. Thank you.

Sincerely,

Rick Lanham
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